

What Is a Flowchart?

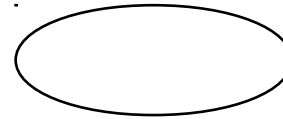
A diagram that uses
graphic symbols to
depict the nature
and flow of the steps in
a

Benefits of Using Flowcharts

- Promote process understanding
- Provide tool for training
- Identify problem areas and improvement opportunities
- Depict customer-supplier relationships

Symbols Used in Flowcharts

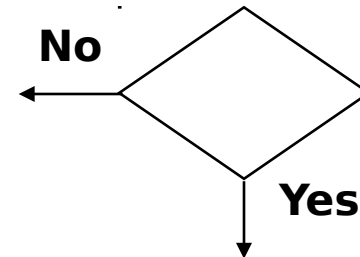
Start / End



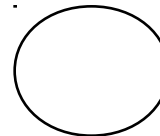
**Process
Step**



Decision



Connector

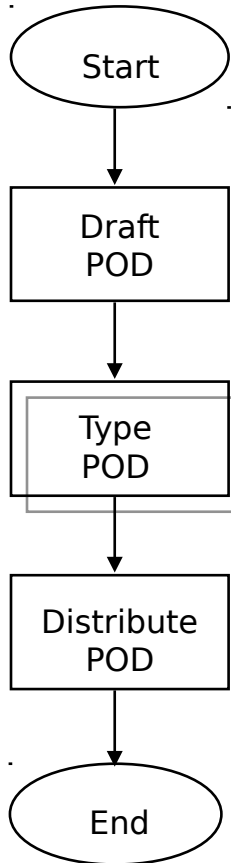


Measurement

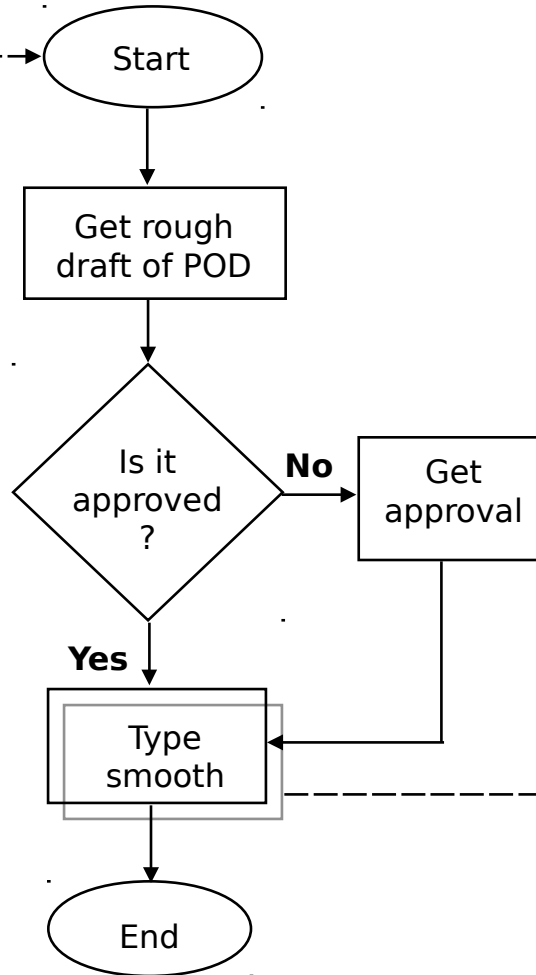


Levels of Flowcharts

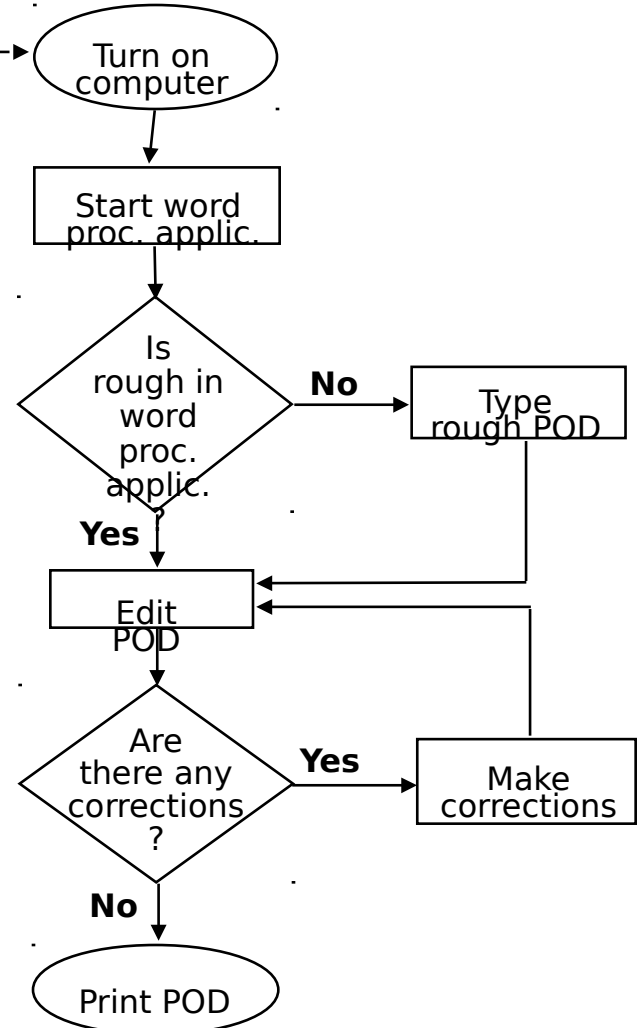
MACRO



MINI



MICRO

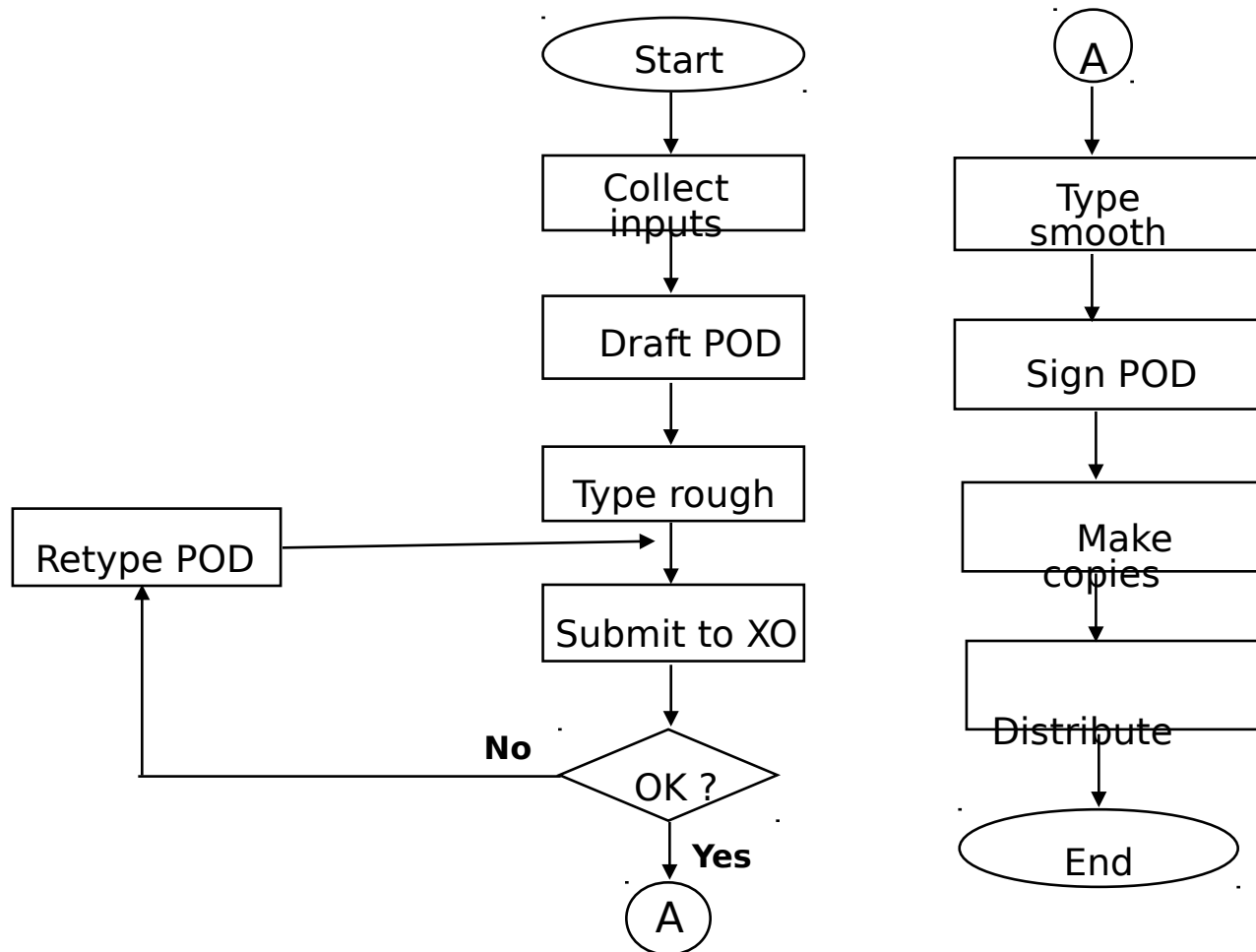


Keys to Success

- Start with the big picture
- Observe the current process
- Record process steps
- Arrange the sequence of steps
- Draw the Flowchart

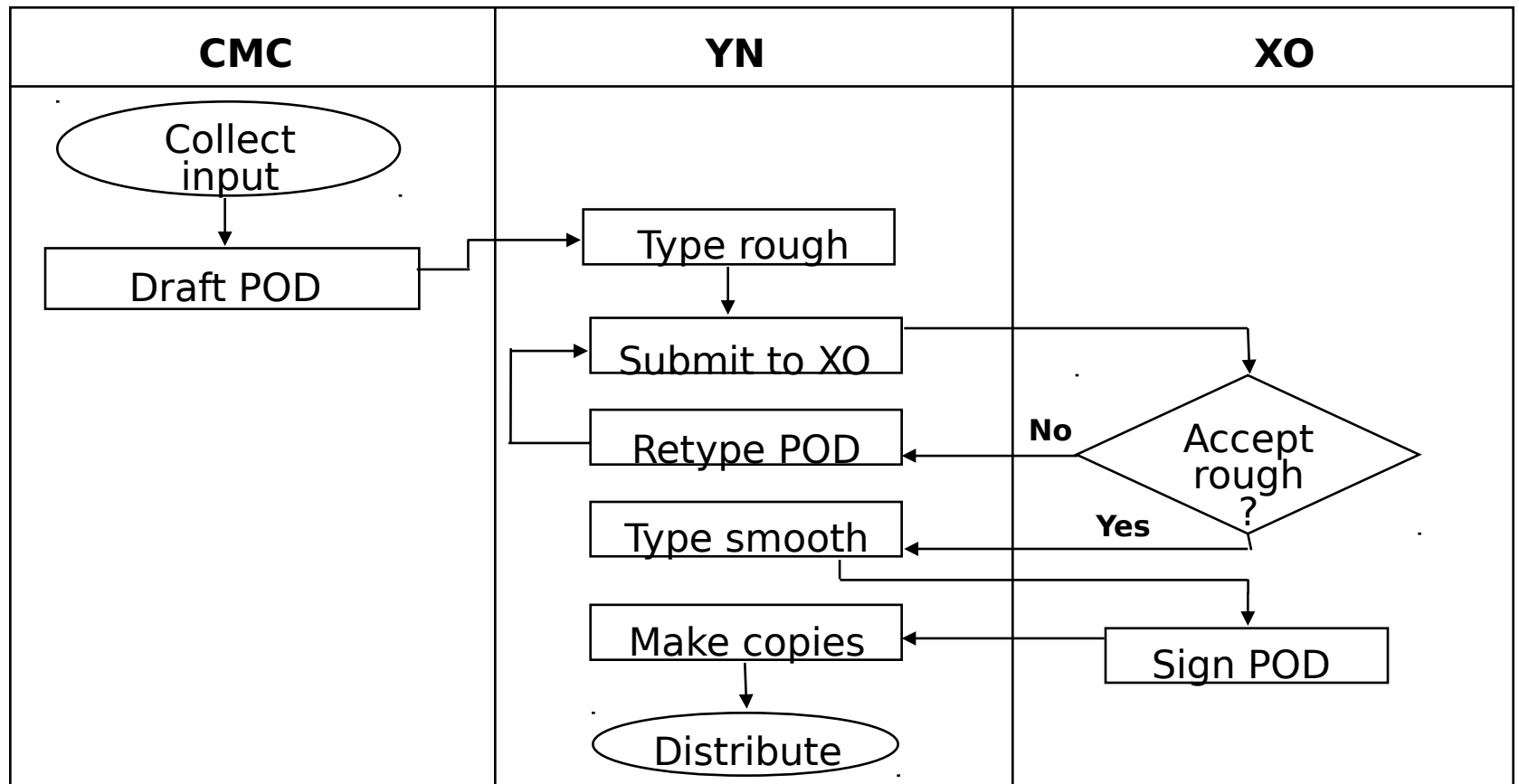
Linear Flowchart Example

Producing the POD



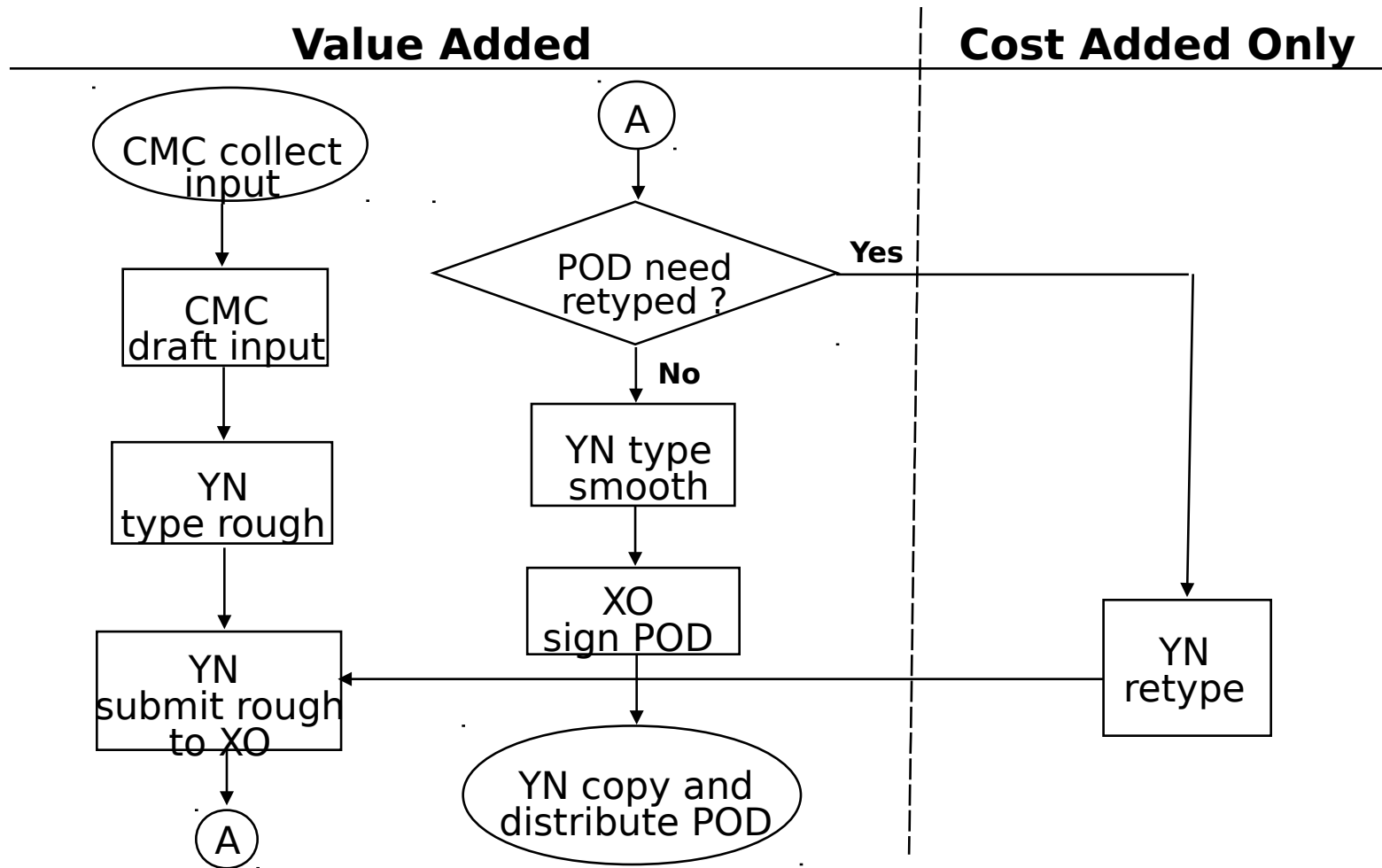
Deployment Flowchart Example

Producing the POD

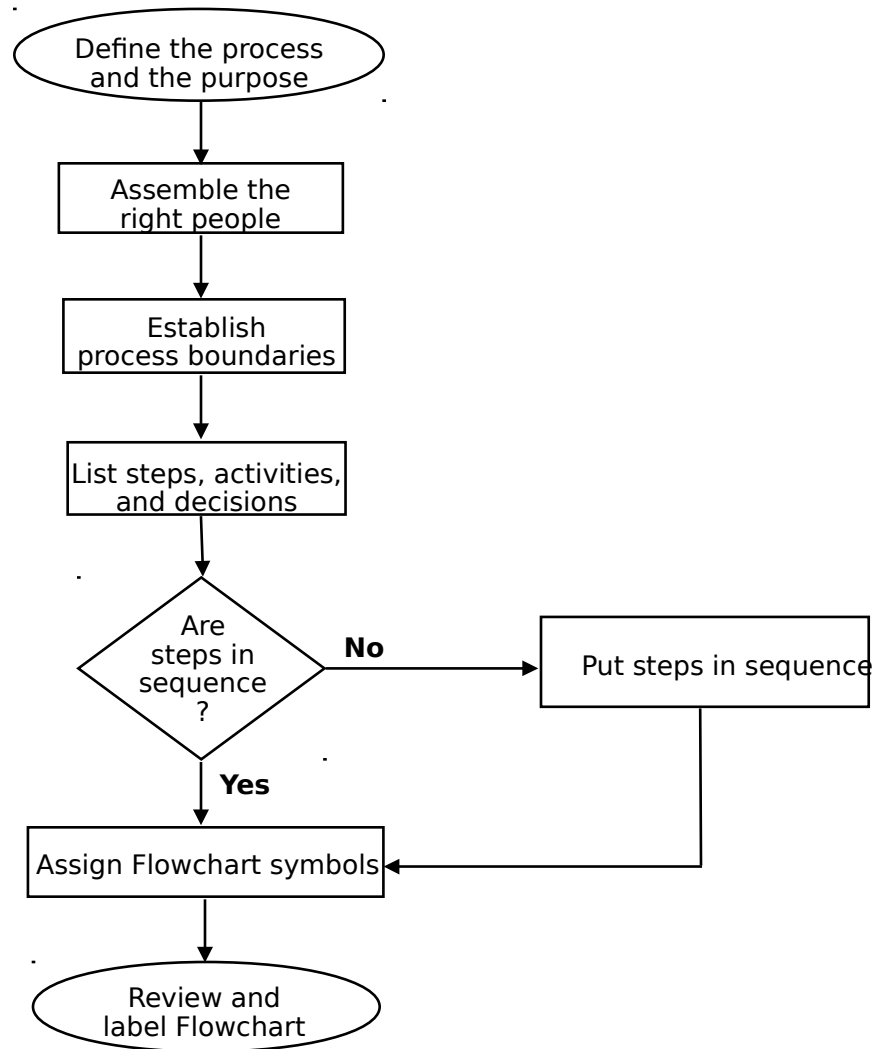


Opportunity Flowchart Example

Producing the POD

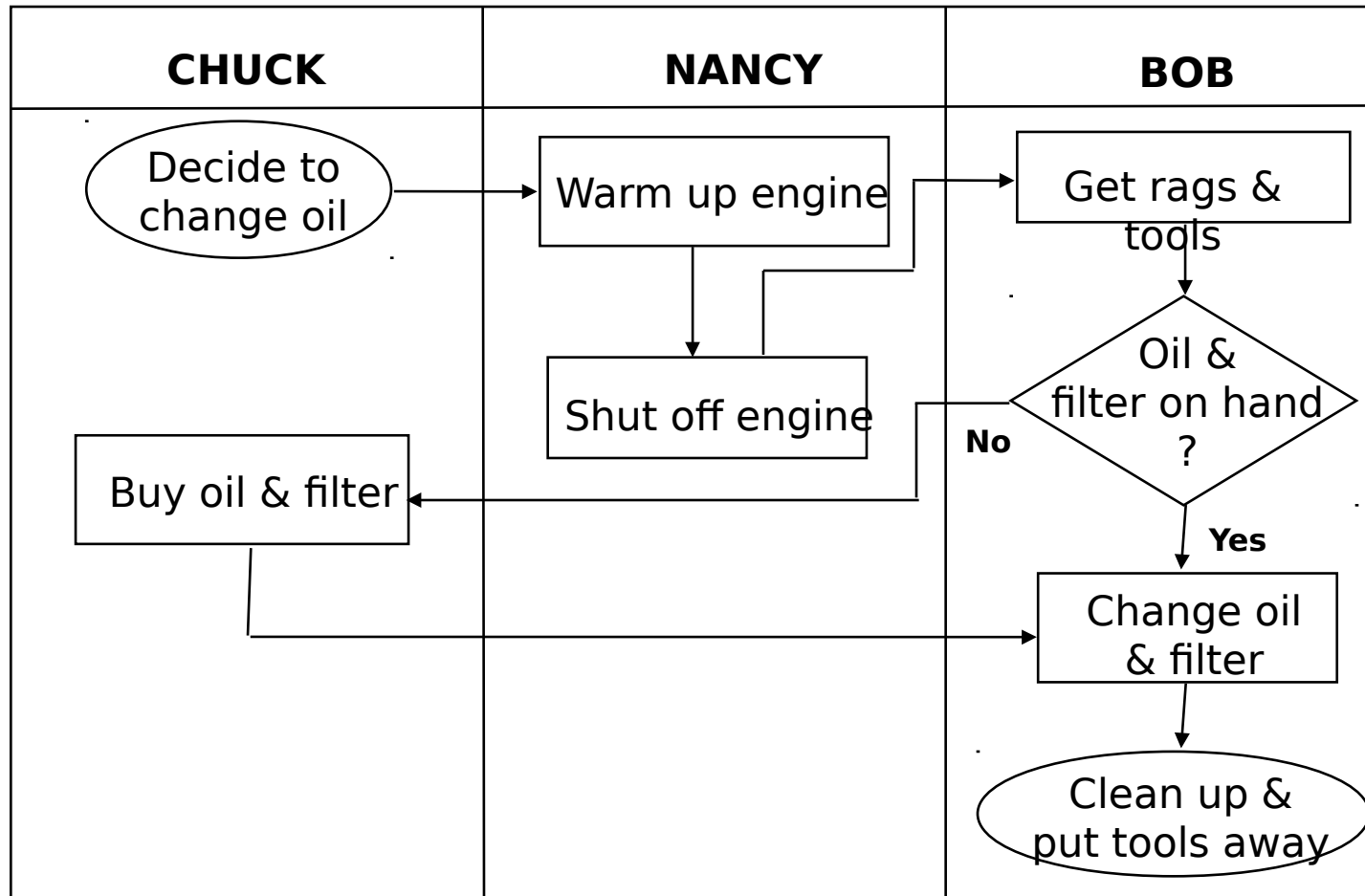


Constructing a Linear Flowchart



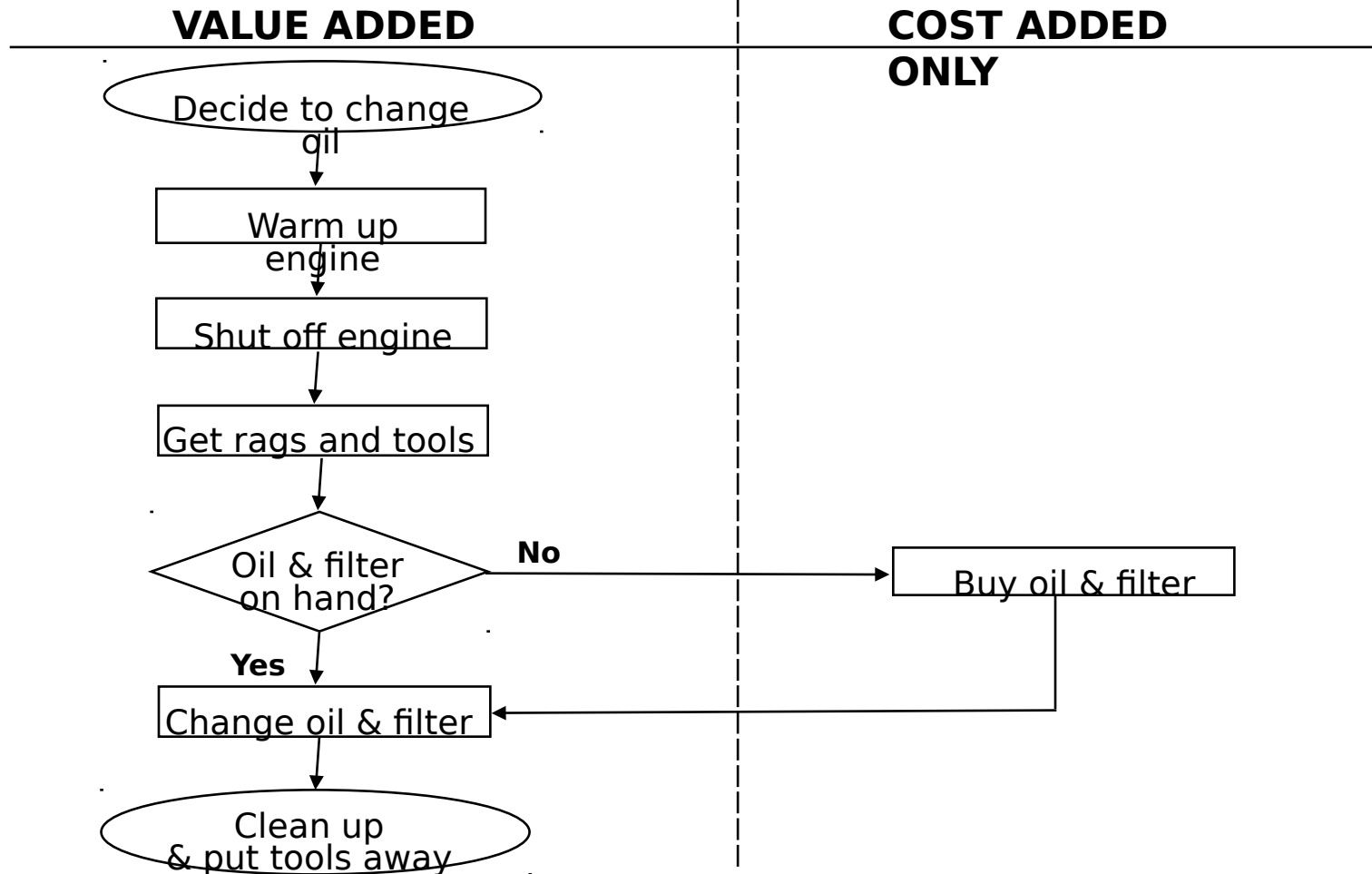
Constructing a Deployment Flowchart

Changing Oil



Constructing an Opportunity Flowchart

Changing Oil



Interpreting Your Flowchart

- Determine who is involved
- Form theories about root causes
- Identify ways to simplify and refine
- Determine how to implement changes
- Locate cost-added-only steps
- Provide training

Interpretation Steps

Step 1 - Examine each process step

Bottlenecks? Weak links? Poorly defined steps? Cost-added-only steps?

Step 2 - Examine each decision symbol

Can this step be eliminated?

Step 3 - Examine each rework loop

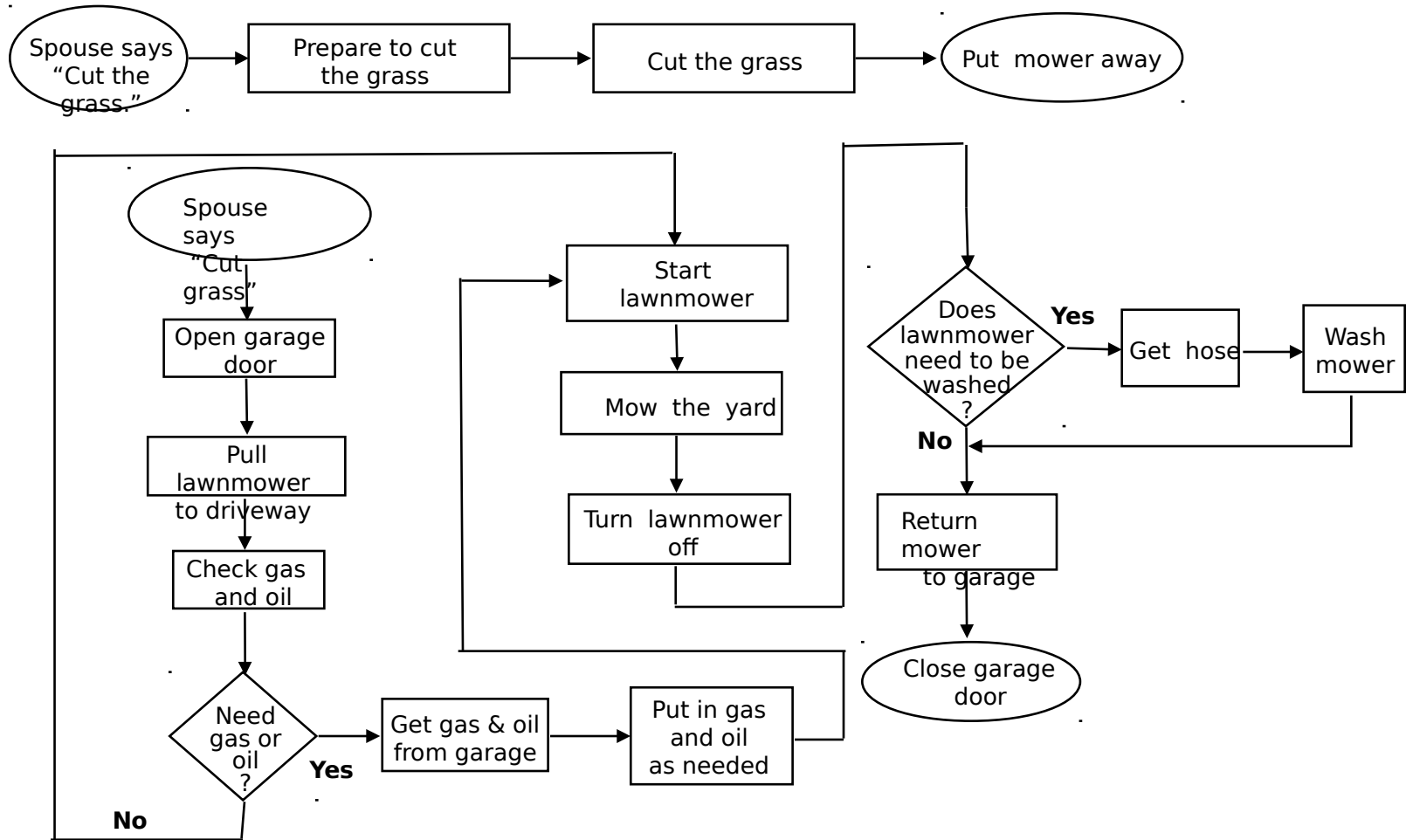
Can it be shortened or eliminated?

Step 4 - Examine each activity symbol

Does the step add value for the end-user?

EXERCISE 1

Flowchart for Cut Grass Process



EXERCISE 3

Fire Drill Preparation Flowchart

